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OBSERVATIONS ON A SO-CALLED CURE FOR TRYPANOSOMIASIS

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The experiments of which an account is given in this paper were undertaken at the request of the British South Africa Company, who had been approached by Mr. H. C. Sieg, with a view to the purchase by them of a serum reputed to be of great value in the treatment of trypanosomiasis.

It would appear from correspondence between His Excellency the Governor-General and the Prime Minister of the Union of South Africa that in May and June, 1912, certain experiments were carried out by Professor Jolly, at the South African College, Capetown. The object of these experiments, which were not completed, was to test the claims of Dr. Menharto, with whom Mr. Sieg was associated, with regard to the therapeutic properties of a serum supposed to cure Sleeping Sickness.

In a letter of the Prime Minister of the Union of South Africa, dated March 26, 1913, it is stated that Mr. Sieg and Dr. Menharto 'were not prepared to divulge the nature of the serum employed by them or the process by which it was obtained, and as the experiments they desired the Government to undertake on their behalf were estimated to cost a sum of possibly £5,000, ministers were not able to consider the matter.'

In view of the publicity which had been accorded this serum as a cure for Sleeping Sickness and of the apparently promising results obtained by Professor Jolly in his incomplete experiments with Dr. Menharto's serum, we decided, in spite of the fact that Mr. Sieg would not inform us either of the constitution or the

method of preparation of the 'serum,' to accede to the request of the British South Africa Company, and examine the remedial powers of this serum on animals experimentally infected with trypanosomiasis.

EXPERIMENTS

We were supplied with several different 'sera' by Mr. Sieg for trial. The 'sera' were grouped in various grades. It was stated by Sieg, in a letter to us, 'that sera were prepared by a mixture of

TABLE I.—Giving the results of treating small animals infected with various pathogenic trypanosomes with the first supplies of 'serum' obtained from Mr. Sieg.

No.	Animal	Strain	No. of Injections of serum given	Day of death	Remarks
1	Guinea-pig	<i>T. rhodesiense</i> ...	2	41	Course of disease unaltered.
2	"	"	3	17	" "
3	"	"	4	35	" "
4	Rabbit	"	2	18	" "
5	"	"	2	24	" "
6	"	"	2	16	" "
7	Rat	"	2	11	" "
8	"	"	2	8	" "
9	"	"	2	8	" "
10	Guinea-pig	<i>T. ugandae</i>	2	24	" "
11	"	"	7	32	" "
12	"	<i>T. evansi</i>	7	58	" "
13	"	"	6	22	" "
14	"	"	7	46	" "
15	"	"	9	55	" "
16	"	<i>T. gambiense</i> ...	7	68	" "
17	"	"	7	59	" "
18	Rat	<i>T. brucei</i>	1	5	" "
19	"	"	1	5	" "
20	"	"	1	5	" "

TABLE II.—Giving the results of treating small animals infected with various pathogenic trypanosomes with the second supplies of 'serum' obtained from Mr. Sieg.

No.	Animal	Strain	No. of injections of serum given	Day of death	Remarks
1	Rabbit	<i>T. brucei</i>	1	11	Course of disease unaltered.
2	"	"	1	24	" "
3	"	"	1	23	" "
4	"	"	1	12	" "
5	"	"	1	11	" "
6	Guinea-pig	"	1	17	" "
7	"	"	1	9	" "
8	"	"	1	18	" "
9	"	"	1	17	" "

certain blood plasma, and contained no chemical or mineral poisons in them.' Injection was to be made subcutaneously, and the dose recommended was 1 c.c. for small animals, to be repeated if necessary.

We employed the sera as directed in the treatment of 29 animals—rats, guinea-pigs and rabbits—infected with various strains of pathogenic trypanosomes, including *T. gambiense* and *T. rhodesiense*. Details are given in the tables. In no case did recovery take place nor, in fact, was the course of the disease influenced in the slightest degree.

CONCLUSION

The 'sera' supplied to us by Mr. H. C. Sieg had not the slightest therapeutic value in animals experimentally infected with pathogenic trypanosomes.

